

AMENDMENTS TO THE CLAIMS

1. **(Cancelled)**

2. **(Currently amended)** The optical disk according to ~~claim 1~~ claim 53, wherein data recorded in the second recording area are stripe marks longer in radial direction and cannot be overwritten after they are written once.

3. **(Currently amended)** The optical disk according to ~~claim 1~~ claim 53, wherein the data for recording and reproducing the contents data in said first recording area include an identifier which shows whether information is recorded in said second recording area.

4. **(Currently amended)** The optical disk according to ~~claim 1~~ claim 53, wherein an identifier which shows whether information that is recorded in said second recording area is recorded in said first section in said second recording area.

5. **(Currently amended)** The optical disk according to ~~claim 1~~ claim 53, wherein the data for recording and reproducing the contents data in said first recording area include an identifier which shows whether information is recorded additionally in said second recording area and an amount of recorded data in said second recording area.

6. **(Currently amended)** The optical disk according to ~~claim 1~~ claim 53, wherein ciphered data are recorded in said third section in said second recording area.

7. **(Currently amended)** The optical disk according to ~~claim 1~~ claim 53, wherein a disk identifier different for each optical disk is recorded in said second recording area.

8. **(Currently amended)** The optical disk according to ~~claim 1~~ claim 53, wherein said second recording area is provided at a predetermined area in an inner peripheral section or an outer peripheral section in the disk.

9. **(Currently amended)** The optical disk according to ~~claim 1~~ claim 53, wherein data of said first recording area comprises data stored in the recording layer as uneven pits in a reflection film, and

wherein data of said first recording area comprises partially removed stripe marks, of said reflection film, longer in the radial direction.

10. **(Currently amended)** The optical disk according to ~~claim 1~~ claim 53, wherein said first recording area includes an area to which information can be written.

11. **(Previously presented)** The optical disk according to claim 10, wherein said first recording area has a recording layer to which data can be recorded with an optical device.

12. **(Original)** The optical disk according to claim 11, wherein said first recording area has said recording layer to which data can be recorded with an optical device a plurality of times.

13. **(Previously presented)** The optical disk according to claim 10, further comprising a recording layer including an organic layer changeable between two states that are optically detectable.

14. **(Original)** The optical disk according to claim 12, wherein said recording layer comprises a magnetic layer having perpendicular magnetic anisotropy in a film normal direction.

15. **(Previously presented)** The optical disk according to claim 14, wherein said second recording area comprises barcode portions and portions between the barcode portions having smaller perpendicular magnetic anisotropy along film normal direction than said barcode portions.

16. **(Original)** The optical disk according to claim 12, wherein said recording layer comprises a plurality of layered magnetic films.

17. **(Previously presented)** The optical disk according to claim 10, further comprising a recording layer made of Ge-Sb-Te alloy.

18. **(Previously presented)** The optical disk according to claim 10, further comprising a recording layer including a film reversibly changeable between two optically detectable states, wherein an amount of reflection light from said first recording area is different from than from said second recording area.

19. **(Previously presented)** The optical disk according to claim 18, wherein said recording layer is reversibly changeable between crystalline and amorphous states according to conditions of a light for illuminating said recording layer.

20. **(Previously presented)** The optical disk according to claim 19, wherein said recording layer comprises barcode portions made of an amorphous state and portions between the barcode portions made of a crystalline state.

21. **(Original)** The optical disk according to claim 19, wherein said recording layer comprises barcode portions, and nonbarcode portions between the barcode portions having a higher reflectivity than the barcode portions.

22. **(Cancelled)**

23. **(Currently amended)** The method according to ~~claim 22~~ claim 54, wherein data are reproduced from the first recording area according to reproduction conditions included in the data to be inhibited from being outputted when the data reproduced from the second recording area are determined to include the data to be inhibited from being outputted.

24. **(Currently amended)** The method according to ~~claim 22~~ claim 54, further comprising:
reproducing data from the first recording area; and
detecting ~~an a second~~ identifier which shows whether data exist in the second recording area,
in the data reproduced from the first recording area;

wherein said reproducing data from the second recording area is performed only when the second identifier is detected.

25. **(Currently amended)** The method according to ~~claim 22~~ claim 54, wherein when the data reproduced from the second recording area are determined to include the data to be inhibited from being outputted, identification is performed by using data reproduced from the second recording area, and only when restriction on the output of the data in the first recording area is canceled, reproduced signals of data recorded in the first recording area are deciphered and decoded.

26. **(Currently amended)** The method according to ~~claim 22~~ claim 54, wherein when the data reproduced from the second recording area are determined to include the data to be inhibited from being outputted, information signals are generated based on the data, and the contents data are superposed and outputted with the information signals.

27. **(Cancelled)**

28. **(Currently amended)** The apparatus according to ~~claim 27~~ claim 55, further comprising:

a detector operable to detect ~~an~~ a second identifier, which shows whether information is recorded in the second recording area in the optical disk, from reproduced signals by said first reproducing section; and

a controller operable to move said optical head to the second recording area when said detector detects the second identifier, reproduces control data from the second recording area by said second reproducing section, and decides according to the identifier in the control data whether the data to be inhibited from being outputted are included.

29. **(Currently amended)** The apparatus according to ~~claim 27~~ claim 55, wherein said second reproducing section reproduces data in the second recording area according to a detection signal received by a photodetector provided in said optical head or a sum of detection signals received by a plurality of photodetectors provided in said optical head.

30. **(Currently amended)** The apparatus according to ~~claim 27~~ claim 55, further comprising a second detector operable to detect whether a protective safety mode is set for the data in the first recording area in the optical disk, from reproduced signals from the second recording area by the second reproducing section,

wherein when the setting of the protective safety mode is detected by said second detector, said first reproducing section performs identification by using data reproduced from the second recording area, and only when restriction on the output of the data in the first recording area is canceled, reproduced signals of data recorded in the first recording area are deciphered and decoded.

31. **(Currently amended)** The apparatus according to ~~claim 27~~ claim 55, wherein the data to be inhibited to be outputted include a disk identification different for each optical disk.

32. **(Currently amended)** The apparatus according to ~~claim 27~~ claim 55, further comprising a key generator operable to generate a secret key for decoding the contents data in the first recording area by using a ciphered disk identification included in the second recording area.

33. **(Previously presented)** The apparatus according to claim 32, wherein said second reproducing section is operable to perform verification by using the secret key generated by said key generator and deciphering and decoding for the contents data in the first recording area.

34. **(Currently amended)** The apparatus according to ~~claim 27~~ claim 55, further comprising:
a third reproducing section operable to decode ciphered data recorded in the second recording area in the optical disk and reproduced by said second reproducing section;
a cipher decoder operable to decode signals reproduced from the first recording area by said first reproducing section;
a first mutual authentication section provided in said third reproducing section; and
a second mutual authentication section provided in said cipher decoder;
wherein only when said first and second mutual authentication sections authenticate mutually, the ciphers reproduced from the first recording area are deciphered.

35. **(Currently amended)** The apparatus according to ~~claim 27~~ claim 55, wherein said second reproducing section is operable to reproduce ciphered data to be inhibited from being outputted, and

wherein said apparatus further comprises a transmission section operable to transmit the ciphered data reproduced by said second reproducing section and plaintext data reproduced from the second recording area through a connection line to an external apparatus.

36. **(Cancelled)**

37. **(Currently amended)** The apparatus according to ~~claim 36~~ claim 56, further comprising:

a third reproducing section operable to reproduce the superposed signals generated by said second reproducing section;

a cipher decoder operable to decode signals reproduced from the first recording area by said first reproducing section;

a first mutual authentication section provided in said third reproducing section; and

a second mutual authentication section provided in said cipher decoder;

wherein only when said first and second mutual authentication sections authenticate identification mutually, the ciphers reproduced from the first recording area are deciphered.

38. **(Currently amended)** The apparatus according to ~~claim 36~~ claim 56, wherein said second reproducing section is operable to reproduce ciphered data to be inhibited from being outputted, and

wherein said apparatus further comprises a transmission section operable to transmit the ciphered data reproduced by said second reproducing section and plaintext data reproduced from the second recording area through a connection line to an external apparatus.

39. **(Cancelled)**

40. **(Currently amended)** The recording and reproducing apparatus according to ~~claim 39~~ claim 57, wherein the signals to be superposed are watermarks generated by using a disk identification recorded in the second recording area.

41. **(Currently amended)** The recording and reproducing apparatus according to ~~claim 39~~ claim 57, further comprising a watermark adder operable to add a watermark to the contents data in the first recording area,

wherein said watermark adder is further operable to generate watermarks based on data recorded in the second recording area and reproduced with an optical head, to add the watermarks to the contents data and to record the added data to the first recording area.

42. **(Currently amended)** The recording and reproducing apparatus according to ~~claim 39~~ claim 57, further comprising:

a frequency converter operable to convert reproduced signals from the first recording area from time axis signals to frequency axis signals to provide first conversion signals;

a mixer operable to add or superposes the first conversion signals to signals reproduced from the second recording area to provide mixed signals; and

a reverse frequency converter operable to convert the mixed signals from frequency axis signals to time axis signals to provide second conversion signals.

43. **(Cancelled)**

44. **(Currently amended)** The recording device according to ~~claim 43~~ claim 58, further comprising a watermark decoder operable to decode watermark information generated based on a disk identification from input signals,

wherein when decoded data obtained by said watermark decoder has a predetermined value, said recording section ciphers the input signals based on the disk identification and records the ciphered signals to the optical disk.

45. **(Currently amended)** The recording device according to ~~claim 43~~ claim 58, wherein said watermark decoder is further operable to convert input signals from time space to frequency space and to decode watermarks by using the signals in the frequency space.

46. **(Cancelled)**

47. **(Previously presented)** The apparatus according to ~~claim 46~~ claim 59, wherein said second reproducing section comprises a phase-encode return-to-zero decoder.

48. **(Currently amended)** The apparatus according to ~~claim 46~~ claim 59, wherein said second reproducing section comprises a device operable to suppress high frequency components with a cut-off frequency of 1.2 MHz.

Claims 49-50 **(Cancelled)**

51. **(Currently amended)** The apparatus according to ~~claim 49~~ claim 60, wherein said second reproducing section comprises a device operable to suppress high frequency components with a cut-off frequency of 1.2 MHz and to decode the secondary data after suppressing high frequency components.

52. **(Currently amended)** The apparatus according to ~~claim 51~~ claim 60, wherein said device is operable to perform phase-encode return-to-zero decoding for the secondary data.

53. **(New)** An optical disk for use with at least one of a recording apparatus and reproducing apparatus, said optical disk having at least a recording layer for recording information, said optical disk comprising:

- a first recording area for recording contents data and data for recording and reproducing the contents data; and

- a second recording area for recording secondary data related to the contents data;

- wherein said second recording area comprises a first section for recording control data and a second section for recording data not to be inhibited from being outputted from the at least one of a recording apparatus and reproducing apparatus,

- wherein the control data includes an identifier indicating whether said second recording area further includes a third section for recording data to be inhibited from being outputted from the at least one of a recording apparatus and reproducing apparatus, and

- wherein when the identifier indicates that said second recording area further includes said third section, said second recording area further includes said third section.

54. **(New)** A reproducing method for reproducing contents from an optical disk having at least a recording layer for recording information, the optical disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data related to the contents data, the second recording area comprising a first section for recording control data and a second section for recording data not to be inhibited from being outputted from at least one of a recording apparatus and reproducing apparatus, said reproducing method comprising:

reproducing data from the second recording area before reproducing data from the first recording area;

deciding, based on an identifier in the control data, whether the second recording area comprises a third section for recording data to be inhibited from being externally outputted from the at least one of a recording apparatus and reproducing apparatus; and

processing the data to be inhibited from being outputted only in the recording and reproducing apparatus when the data reproduced from the second recording area are determined to include the data to be inhibited from being outputted, without outputting the data to be inhibited from being outputted,

wherein the identifier indicates whether the second recording area further includes the third section for recording the data to be inhibited from being outputted from the at least one of a recording apparatus and reproducing apparatus.

55. **(New)** A reproducing apparatus for reproducing contents from an optical disk having at least a recording layer for recording information, the optical disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data related to the contents data, the second recording area comprising a first section for recording control data and a second section for recording data not to be inhibited from being outputted from said reproducing apparatus, said reproducing apparatus comprising:

an optical head operable to reproduce information from the optical disk with an optical spot;

a first reproducing section operable to reproduce data with said optical head from the first recording area; and

a second reproducing section operable to reproduce data with said optical head from the second recording area,

wherein the control data includes an identifier indicating whether the second recording area further includes a third section for recording data to be inhibited from being outputted from said reproducing apparatus,

wherein when the identifier indicates that the second recording area further includes the third section, the second recording area further includes the third section, and

wherein when data to be inhibited from being outputted are recorded in the third section, said second reproducing section processes the data in the third section but does not output the data in the third section.

56. **(New)** A reproducing apparatus for reproducing contents from an optical disk having at least a recording layer for recording information, the optical disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data related to the contents data, the second recording area comprising a first section for recording control data and a second section for recording data not to be inhibited from being outputted from said reproducing apparatus, said reproducing apparatus comprising:

an optical head operable to reproduce information from the optical disk with an optical spot;

a first reproducing section operable to reproduce data with said optical head from the first recording area; and

a second reproducing section is operable to reproduce data with said optical head from the second recording area;

wherein the control data includes an identifier indicating whether the second recording area further includes a third section for recording data to be inhibited from being outputted from said reproducing apparatus,

wherein when the identifier indicates that the second recording area further includes the third section, the second recording area further includes the third section, and

wherein said second reproducing section is further operable to generate information signals based on the data to be inhibited from being outputted that is recorded in the third section, and said first reproducing section is further operable to superpose the information signals to signals reproduced from the first recording area and to output the superposed signals.

57. (New) A recording and reproducing apparatus for recording and reproducing contents from an optical disk having at least a recording layer for recording information, the optical disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data related to the contents data, the second recording area comprising a first section for recording control data and a second section for recording data not to be inhibited from being outputted from said recording and reproducing apparatus, said recording and reproducing apparatus comprising:

a generator operable to generate information signals based on data inherent to the optical disk; and

a recorder operable to superpose the generated information signals with predetermined signals and to record the superposed signals to the first recording area or add them to the second recording area,

wherein the control data includes an identifier indicating whether the second recording area further includes a third section for recording data to be inhibited from being outputted from said recording and reproducing apparatus,

wherein when the identifier indicates that the second recording area further includes the third section, the second recording area further includes the third section, and

wherein the data inherent to the optical disk are recorded in the third section.

58. (New) A recording apparatus for recording contents to an optical disk having at least a recording layer for recording information, the optical disk comprising a first recording area for

recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data related to the contents data, the second recording area comprising a first section for recording control data and a second section for recording data not to be inhibited from being outputted from said recording apparatus, said recording apparatus comprising:

- a cipher device operable to cipher the contents based on data including information inherent to a disk; and

- a recording section operable to record the contents ciphered by said cipher device in the first recording area in the optical disk,

- wherein the control data includes an identifier indicating whether the second recording area further includes a third section for recording data to be inhibited from being outputted from said recording apparatus,

- wherein when the identifier indicates that the second recording area further includes the third section, the second recording area further includes the third section, and

- wherein the information inherent to the disk is recorded in the third section.

59. (New) A reproducing apparatus for reproducing contents from an optical disk having at least a recording layer for recording information, the optical disk comprising a first recording area for recording ciphered contents data and data for recording and reproducing the ciphered contents data, and a second recording area for recording secondary data related to the contents data, the second recording area comprising a first section for recording control data and a second section for recording data not to be inhibited from being outputted from said reproducing apparatus, the secondary data including a disk identification inherent to each optical disk, said reproducing apparatus comprising:

- an optical head operable to reproduce information from the optical disk with an optical spot;

- a first reproducing section operable to reproduce data with said optical head from the first recording area; and

a second reproducing section operable to reproduce data with said optical head from the second recording area,

wherein the control data includes an identifier indicating whether the second recording area further includes a third section for recording data to be inhibited from being outputted from said reproducing apparatus,

wherein when the identifier indicates that the second recording area further includes the third section, the second recording area further includes the third section, and

wherein said first reproducing section is operable to decode the ciphered contents data by using the disk identification reproduced by said second reproducing section.

60. **(New)** A reproducing apparatus for reproducing contents from an optical disk having at least a recording layer for recording information, the optical disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data related to the contents data, the second recording area comprising a first section for recording control data and a second section for recording data not to be inhibited from being outputted from said reproducing apparatus, the secondary data including a disk identification inherent to the optical disk, said reproducing apparatus comprising:

an optical head operable to reproduce information from the optical disk with an optical spot;

a first reproducing section operable to reproduce data with said optical head from the first recording area; and

a second reproducing section operable to reproduce data with said optical head from the second recording area,

wherein the control data includes an identifier indicating whether the second recording area further includes a third section for recording data to be inhibited from being outputted from said reproducing apparatus, and

wherein when the identifier indicates that the second recording area further includes the third section, the second recording area further includes the third section.

61. **(New)** The optical disk according to claim 53, wherein the third data includes data on identity of the optical disk.